

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
12 April 2001 (12.04.2001)

PCT

(10) International Publication Number
WO 01/26002 A1(51) International Patent Classification⁷: G06F 17/60

Tsui [US/US]: 236 Bonita Avenue, Piedmont, CA 94611 (US). WILLIAMS, Lewis, T. [US/US]: 125 Chapel Drive, Mill Valley, CA 94941 (US).

(21) International Application Number: PCT/US00/27411

(22) International Filing Date: 3 October 2000 (03.10.2000)

(74) Agents: ROBINS, Roberta, L. et al.: Robins & Associates, Suite 200, 90 Middlefield Road, Menlo Park, CA 94025 (US).

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/157,799	5 October 1999 (05.10.1999)	US
60/159,626	14 October 1999 (14.10.1999)	US
09/421,418	19 October 1999 (19.10.1999)	US
60/165,396	15 November 1999 (15.11.1999)	US
60/214,052	26 June 2000 (26.06.2000)	US

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

US	09/421,418 (CIP)
Filed on	19 October 1999 (19.10.1999)

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).(71) Applicant (*for all designated States except US*): BIOLICENSE.COM [US/US]; 24301 Southland Drive, Suite 300, Hayward, CA 94545 (US).Published:
— With international search report.

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): COLLINS, Amy, L.,

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 01/26002 A1

(54) Title: METHOD AND SYSTEM FOR PROVISION OF INFORMATION ON TECHNOLOGY

(57) Abstract: The present invention relates to systems and methods for providing a searchable source and access, electronically, via cable or via wireless, to previously confidential or unpublished information relating to technology, including products that may be available for licensing. This information is collected from a plurality of entities and can be made available for access to a plurality of parties. This invention further relates to systems and methods relating to unpublished information on novel technology that are accessible via a secured website, for example, one that is password protected, to provide security for the stored information, precluding access by non-authorized individuals. This invention also relates to systems and methods for providing expert's opinion on novel technology, and for submission of a bid for on a technology online.

WO 01/26002

PCT/US00/27411

METHOD AND SYSTEM FOR PROVISION OF INFORMATION ON TECHNOLOGY

5

TECHNICAL FIELD

This invention relates to a method and system for provision of previously unpublished and/or confidential information electronically to multiple users, where the information relates to novel technology or products undergoing development for commercialization.

10

BACKGROUND

Innovation is one of the keys to gaining competitive advantage in the business world. Companies that are engaged in competitive businesses, such as those engaged in the biotech and pharmaceutical businesses and high tech computer, electronics and engineering businesses, are particularly motivated to enhance their competitive advantage by investing in novel, innovating technologies. Novel technologies are needed to develop novel or improved products, such as therapeutics, prophylactics and diagnostics, in the biotech area and computers, chips, software, multimedia and communications systems and devices for example, in the high tech area. Thus, one of the business goals of these competitive companies must be to continually seek new technology to supplement, enhance, upgrade or revolutionize their internal research and development ("R&D") efforts or product pipelines. Such demand for innovation is expected to be ongoing and is not limited to business or product cycles.

20

The current methodology of seeking novel technology is inefficient. Organizations that seek new technology, such as pharmaceutical and biotech companies that are engaged in drug development (hereafter "Purchasing Organization or Purchaser") typically send representatives to attend scientific meetings to hear about new developments in their field of interest. At these meetings, the company representatives generally attend presentations and poster sessions mostly given by investigators (hereafter "Investigators") from academic or other research organizations or small start-up companies (hereafter "Selling Organization or Seller")

30

WO 01/26002

PCT/US00/27411

who have worked on developing new technology. The company's representatives then report back to management regarding interesting new technology and, together with management, determine whether to sign a confidential disclosure agreement (hereafter "CDA") to obtain further information about the novel technology.

- 5 Oftentimes, just putting the CDA in place requires several rounds of back and forth negotiations between business and/or legal personnel in the Purchasing Organization and their counterparts in the Selling Organization, generally taking from weeks to months.

- 10 Once a CDA is signed and the scientists from the Purchasing and the Selling Organizations have met, and if there were continued interest in the new technology, the business and legal staff from the Selling Organization and their counterparts in the Purchasing Organization would negotiate terms for one or more agreements. The agreements that are generally entered into at this stage are: option agreements which confer upon an Optionee an option for an exclusive or non-exclusive license; an
15 exclusive or non-exclusive license agreement; and/or an R&D collaboration agreement, with R&D funding support to be paid by the Purchasing Organization to the Selling Organization and the Investigator.

- Alternatively, licensing personnel from offices of technology transfer ("OTT") of the Selling Organizations may initiate contact with multiple potential Purchasing
20 Organizations. The Sellers typically send out one page letters to potential Purchasers providing the potential Purchasers with a short non-confidential disclosure of the invention that is available for licensing. The business officers from the Selling Organizations generally have to follow-up their letters with several phone calls before catching the attention of the busy licensing personnel at Purchaser Organizations,
25 generally taking about one, two or three months. Putting a CDA in place then takes another month or two. After parties have executed a CDA, confidential technical information is then sent to the potential Purchaser.

- Academic institutions and non-profit organizations have limited resources in obtaining patent protection for inventions developed by their employees. In some
30 institutions, patent protection is not sought for new inventions unless a sponsor has indicated that it is willing to pay for the cost of preparing and filing a patent

WO 01/26002

PCT/US00/27411

application. Typically, there is a deadline attached to filing a patent application and the institution does not have unlimited time to search for a sponsor. This is because invention disclosures generally come to the attention of an institution's OTT when the investigator wishes to either submit for publication a manuscript describing the
5 invention or to submit an abstract for presentation or for a poster session at a scientific meeting. In such instances, the investigators are often under a tight timeframe for submission of manuscript or abstract. If a sponsor is not found within a short period of time, the investigator, especially those in the academia, would typically go ahead to submit such manuscript and data for publication or review without first obtaining
10 patent protection. It can be seen, therefore, that the academic or other non-profit research institutions may be losing valuable intellectual property because of the inefficiency of the technology transfer system.

As can be seen, the process of getting new technology into the hands of the potential Purchaser typically takes several months to a year and sometimes more. In
15 the meantime, the Seller runs the risk of the technology becoming stale or published without the proper patent protection, owing to the Investigators' need to publish, and the Purchaser runs the risk of losing out valuable technology to the public as a result of publication or to another party who may be able to move faster.

Furthermore, small companies that are developing new products for
20 commercialization frequently need the resources of larger companies to assist in the development. Small companies, hence, also spend a significant amount of time and effort in presenting information, including data, relating to their technology and products to large companies, in the hope of gaining their interests in either in entering into a licensing arrangement or agreeing to co-development or co-commercialization
25 of the products.

The large companies, on the other hand, typically spend an inordinate amount of time reviewing technology or products from the academia and from small companies. A serious evaluation effort typically involves a "due diligence team" to develop a well-rounded evaluation of the product opportunities. A due diligence team
30 typically includes one or more technical experts who are familiar with the technical field, such as a cardiologist to evaluate a drug for treating heart disease. The technical

WO 01/26002

PCT/US00/27411

experts on the team may include those having expertise in different technical areas. For example, in the development of a drug for human use, the technical experts may include one or more of a research scientist, a clinician, a toxicologist, an oncologist, a pharmacologist and a scientist knowledgeable in the area of manufacture of pharmaceutical products. The due diligence team can also include a regulatory expert who is knowledgeable about issues relevant to obtaining regulatory clearance for commercialization of the product; a marketing expert who is knowledgeable about issues relevant to the marketing for the product; a financial expert who is knowledgeable about issues relevant to the profitability of the development of the product.

Sometimes, the large companies lack the requisite expertise or the time to conduct an appropriate due diligence evaluation of a product opportunity on a timely basis, and have need to consult outside experts in the field. In such circumstances, a company has to identify the appropriate outside expert or experts, obtain their consent to participate in the evaluation, enter into a consulting agreement and confidentiality agreement with them, and then provide them with the necessary information for evaluation purposes. Thus, in licensing of a product, involving an evaluation process, is also cumbersome, time-consuming and resource demanding.

Conducting business on the Internet has progressed considerably in recent years. An example is the business Priceline.com as embodied in U.S. Patent No. 5,897,620, issued April 27, 1999, entitled "Method and Apparatus for the Sale of Airline-specified Flight Tickets." Another example of exchanging information via the Internet is shown in U.S. Patent No. 5,884,272, issued March 16, 1999, and is entitled "Method and System for Establishing and Maintaining User-Controlled Anonymous Communications." A further example is U.S. Patent No. 5,862,223, issued January 19, 1999, entitled "Method and Apparatus for a Cryptographically-Assisted Commercial Network System Designed to Facilitate and Support Expert-Based Commerce."

Certain websites have recently appeared, allegedly for the purpose of facilitating the transfer of technology. Those websites include: <http://www.knowledgeexpress.com>, <http://www.techex.com>, and

WO 01/26002

PCT/US00/27411

http://www.uventures.com, http://www.pl-x.com. An article in L.A. Times on October 25, 1999, available on http://www.latimes.com, entitled "Marketplace of Ideas: Selling Patents Online," discusses some of these businesses. None of these websites appear to disclose a system as presently claimed or a method of using such a system.

It would be advantageous to both the Selling Organization and to the Purchasing Organization if there were a more efficient way to transfer novel technology, including products, from one party to the other that is more productive and less time consuming. It would further be advantageous if the Internet can be utilized to accomplish such transfer in an expedient manner.

SUMMARY OF THE INVENTION

It is, therefore, an object of the present invention to provide a more efficient system and/or method for transferring novel technology, including products, from one sector to another.

It is a further object of the present invention to match Information Seller with Information Purchaser for the purpose of conveying confidential proprietary information from Seller to Purchaser to facilitate technology transfer from Seller to Purchaser. The information relates to novel technology, including products. The technology transfer can be in the form of an assignment or a license or an option or co-development of a product or a research collaboration or a sponsored research.

It is another object of the present invention to provide a system having a plurality of pieces of previously unpublished and confidential information, where the information is accessible electronically and is collected from a plurality of entities. The information can be accessible electronically, via cable or via wireless means. Moreover, the system may comprise at least two levels of confidential information, the first level providing sufficient information to inform potential licensees or partners of the general nature of the technology to be licensed and the second level providing additional detail and, optionally, experimental data.

It is another object of the present invention to provide a system that contains previously unpublished information, where the information is accessible to a plurality

WO 01/26002

PCT/US00/27411

of parties.

In accordance with one of the objects of the present invention, a system is provided that contains a plurality of pieces of previously unpublished information, where the unpublished information is accessible electronically and is collected from at least two entities.

In accordance with another object of the present invention, a system is provided as above, where previously unpublished information includes manuscripts, invention disclosures, unpublished patent applications, or experimental, including clinical, data. The unpublished information can be an abstract or a complete document. Additional information that may be provided includes patent searches listing published and/or unpublished patents and/or patent applications that affect the patentability and/or freedom of operation of the listed technology.

In accordance with a further object of the present invention, a system is provided as above, where the information is collected from multiple entities, for example, two, three, four, five, six, seven, eight, nine or ten entities. The information can also be collected from fifteen, twenty, twenty-five, thirty, forty, fifty, a hundred, a hundred fifty, two hundred or more entities.

In accordance with another object of the present invention, a system is provided as above, where the information may be accessible electronically to multiple parties, for example, two, three, four, five, six, seven, eight, nine, ten or more parties. The information can also be accessible electronically to fifteen, twenty, twenty-five, thirty, forty, fifty, a hundred, a hundred and fifty or two hundred or more parties.

In accordance with yet another object of the present invention, a system is provided as above, where the information is compiled in the form of a database, which is accessible via the Internet or an Intranet. The system can be housed in a server. The system may also contain published information. The published information can include, for example, published patent applications or issued patents or published journal or news articles or abstracts thereof.

In accordance with a further object of the present invention, a system is provided as above, where the system has a means for accepting a search term for searching the database, a means for searching the database, and/or a means for

WO 01/26002

PCT/US00/27411

providing results of a search of the database.

In accordance with another object of the present invention, the system includes a search engine.

In accordance with yet another object of the present invention, there is
5 provided a system that contains a means for accepting a search term and the term is selected from the following categories: a disease category, a condition category, a technology category, a product-in-development category, a date category, an institution category, a manuscript category, an invention disclosure category, a patent application category, an issued patent category, and a product candidate category.

10 In accordance with another object of the present invention, a system is provided as above, where the results of a search is linked to further information, such as, more detailed textual information, or an e-mail address, or an audio-visual presentation. The more detailed textual information can include, for example, a complete document or an expert's opinion on an item resulting from the search. The
15 expert's opinion can include, moreover, one or more opinions of a panel of experts.

In accordance with as yet another object of the present invention, a system is provided as above, where the system contains information regarding technology that is available for licensing.

In accordance with as yet a further object of the present invention, a system is
20 provided as above, where the technology can be computer hardware technology, computer software technology, electronic technology, communications technology, multimedia technology, satellite technology, cable technology, fiber optics technology, or wireless technology.

In accordance with yet a further object of the present invention, the system as
25 provided above can include unpublished information on technologies such as one or more of those in the field of electrical engineering, mechanical engineering, chemical engineering, civil engineering, and aerospace engineering.

In accordance with as yet another object of the present invention, the system as provided above can include one or more technologies in the area of gene therapy,
30 cell therapy, vaccine, diagnostics, small molecule drug discovery, ribozymes, antisense, DNA or RNA complementary molecules, gene discovery, expression,

WO 01/26002

PCT/US00/27411

vector, purification, manufacturing, formulation, drug delivery, gene function identification, microarray, DNA or RNA or amino acid sequencing, antibody production, method of treatment, growth factor, cell differentiation, cytokine, cell receptor, and signaling. The DNA or RNA complementary molecules can be made of
5 compounds such as peptide nucleic acid and phosphoramidates. Small molecules include compounds such as troglitazones.

In accordance with another object of the present invention, there is provided a system as above, where the system includes a means for providing notification of new entries of unpublished information into the system.

10 In accordance with yet another object of the present invention, there is provided a system as above where the system further includes a means for tracking the number of parties accessing the system, the identity of each party accessing the system, and/or the search or searches conducted by a party accessing the system.

In accordance with a further object of the present invention, there is provided a
15 system that contains a memory device and the memory device contains unpublished information that is collected from at least two entities. The memory device can also contain published information.

In accordance with yet another object of the present invention, there is provided a system as above that contains a processor that is in communication with
20 the memory device. The processor can be configured to receive a query to conduct a search, to conduct a search, and/or to provide results of a search. The processor can further be configured to provide notification of new information added to the memory device.

In accordance with still another object of the present invention, there is
25 provided a system that contains a means for storing unpublished information, a means for receiving a query for a search, a means for conducting a search of the stored unpublished information, and/or a means for displaying results of a search, where the unpublished information includes information regarding manuscripts, patent applications, invention disclosures and/or experimental results.

30 In accordance with yet another object of the present invention, there is provided a method that includes the steps of (a) viewing, using a computer, a listing

WO 01/26002

PCT/US00/27411

of unpublished information, where the unpublished information is collected from at least two entities; (b) transmitting, using a computer, a query to search the listing of unpublished information; and (c) receiving, using a computer, results of the search. The unpublished information can be information regarding technology that is

5 available for licensing and can include information regarding manuscripts, patent applications, invention disclosures and/or experimental results. The unpublished information can be in the form of abstracts and/or entire documents.

In accordance with another object of the present invention, there is provided a method of obtaining confidential information on technologies for licensing purposes.

10 The method includes the steps of (a) submitting a query to obtain confidential information on a piece of technology that is available for licensing; (b) receiving authorization to access a restricted access confidential database to obtain the confidential information; and (c) accessing the confidential information in the database pursuant to the authorization. The restricted access confidential database

15 comprises confidential information on technologies that are available for licensing and the confidential information is collected from at least three parties.

In accordance with still another object of the present invention, there is provided a method for provision of unpublished information using a computer, the method having the steps including: (a) creating a means for storage of unpublished

20 information that can be searched; and (b) providing controlled access to stored unpublished information to a designated user, where the information includes unpublished information that can be manuscripts, invention disclosures and/or patent applications. Additionally, the information can include experimental results and/or published information. The published information can be published articles,

25 published patent applications and/or issued patents.

In accordance with yet a further object of the present invention, there is provided a system as above, where the system further includes a first template for conveyance of unpublished information. The first template can include, for example, name of person submitting the unpublished information and a description of the

30 unpublished information. The first template can also include other information, for example, name of employer organization, title of person submitting information,

WO 01/26002

PCT/US00/27411

telephone number for work, telephone number for home, cell phone number, facsimile number, e-mail address, work address, home address and/or preferred mode of communication.

In accordance with yet another object of the present invention, there is
5 provided a system as above, where the system further includes a second template for conveyance of a bid. The second template can include, for example, a bid to obtain an option to license the unpublished information, a bid to obtain a license to the unpublished information, a bid to sponsor a research program, a bid to collaborate in a research program, a bid to collaborate in a development program or a co-development
10 program, and/or a bid to collaborate in co-marketing of a product, co-promotion of a product or co-commercialization.

In accordance with a further object of the present invention, there is provided a system as above, where the unpublished information includes experimental data on a product that is being developed as a drug for either human or animal use. Preferably,
15 the product has undergone one of more of certain studies, such as an *in vitro* cellular study, an *in vivo* animal study, a toxicology study, a pharmacology study, a carcinogenicity study, a human safety study, a human dosing study, or a human efficacy study.

In accordance with another object of the present invention, there is provided a
20 system as above, where the unpublished information includes data on the product as a result of one or more studies, such as an *in vitro* cellular study, an *in vivo* animal study, a toxicology study, a pharmacology study, a carcinogenicity study, a human safety study, a human dosing study, or a human efficacy study.

In accordance with as yet another object of the present invention, there is
25 provided a system as above where the unpublished information includes an expert's opinion on the technology or product available for licensing. Further, the expert's opinion can be opinion from a panel of experts. Moreover, the expert's opinion can be on one or more topics such as the mechanism of action of the product, the safety of the product, efficacy of the product, regulatory issues regarding the product,
30 manufacturing issues regarding the product, toxicology issues regarding the product, carcinogenicity issues regarding the product, pharmacological issues regarding the

WO 01/26002

PCT/US00/27411

product, marketing issues regarding the product, competitiveness issues regarding the product, or financial issues regarding the product.

In accordance with a further object of the present invention, there is provided a system as above, where the unpublished information includes information on a product that is in development and the product is a gene therapy product, a cell
5 therapy product, a vaccine product, a diagnostic product, a small molecule product, a recombinant protein product, a DNA product, a RNA product, a plasmid product, a viral vector product, an antisense product, a ribozyme product, a RNA-complementary product, a DNA-complementary product, an antibody product, a
10 formulation product, a microarray product, a growth factor product, or a cytokine product. The RNA- or DNA- complementary product includes a peptide nucleic acid compound or a phosphoramidate compound.

In accordance with another object of the present invention, there is provided a system as above, where the product is for treatment of one or more diseases or
15 conditions such as: age related disease or conditions including Parkinson's, Alzheimer's and macular degeneration; allergy including allergic rhinitis and asthma; bone diseases or conditions including osteoporosis, fracture, and osteoarthritis; cancer including breast cancer, colon cancer, lung cancer, prostate cancer, ovarian cancer, liver cancer, pancreatic cancer, brain cancer, and lymphoma; cardiovascular diseases
20 or conditions including angina, hypertension, congestive heart failure, arrhythmia, and TMJ; gastrointestinal diseases or conditions including ulcer; genetic diseases or conditions including muscular dystrophy and ADA; hematological diseases or conditions including hemophilia, leukemia, and multiple myeloma; immune diseases or conditions including arthritis, autoimmune disease, lupus erythematosus, psoriasis,
25 rheumatoid arthritis, and scleroderma; infectious diseases including bacterial, fungal, viral and pneumonia; liver diseases or conditions including cirrhosis, gall bladder diseases and hepatitis; metabolic diseases or conditions including diabetes, type I and type II, and obesity; neurological diseases or conditions including multiple sclerosis, and Alzheimer's; ocular diseases or conditions including blindness, diabetic
30 neuropathy, and macular degeneration; pulmonary diseases or conditions including asthma, cystic fibrosis, emphysema, and pneumonia; psychiatric diseases or

WO 01/26002

PCT/US00/27411

conditions including attention deficit disorder, depression and schizophrenia; renal diseases or conditions including glomerulonephritis, hypertension, pyelonephritis, renal tubular acidosis and transplantation; sepsis; skin diseases or conditions including acne, bacterial, fungal and psoriasis; transplantation; trauma including stroke; and
5 wounds including burns.

In accordance with a further object of the present invention, there is provided a system as above, where the system includes a memory device and processor, such as a computer, where the processor is configured to accept a question for an expert. The processor can further be configured to provide notification of the expert of a pending
10 question. The processor can still further be configured to display the question for the expert. The processor can also be configured to accept a response from the expert. The processor can, moreover, be configured to provide notification of the expert's response, and display the expert's response. The particular expert can be selected by the person submitting the question from a panel of experts listed on the website or
15 unselected.

In accordance with yet another object of the present invention, there is provided a system that includes a means for storing unpublished information and a means for allowing controlled access, for example, controlled by a password login means, to the stored unpublished information.

20 In accordance with as yet another object of the present invention, there is provided a method that includes the steps of accessing, using a computer, a website that displays unpublished information as above; and viewing the website.

In accordance with a further object of the present invention, there is provided a method as above, where the method further includes the step of viewing an expert's
25 opinion on the unpublished information.

Further objects, features, and advantages of the present invention will become apparent from the following detailed description. It should be understood, however, that the detailed description, while indicating preferred embodiments of the invention, is given by way of illustration only, since various changes and modifications within
30 the spirit and scope of the invention will become apparent to those skilled in the art from this detailed description.

WO 01/26002

PCT/US00/27411

BRIEF DESCRIPTION OF THE FIGURES

Figures 1A-1D depict representative disease categories and subcategories for use with the invention.

5 Figure 2 shows representative technology categories for use with the invention.

DETAILED DESCRIPTION

10 It has been discovered that a system can be used to provide previously unpublished, confidential information electronically, via cable or via wireless transmission, where the information is collected from at least two entities. For purposes herein, the following terms shall have the following meaning:

15 “Accessibility” of the unpublished information to “at least two parties” excludes a situation in which one individual within an organization creates a database for his or her own personal use or for the use of others in the same or affiliated organization in which that individual works. In this context, all individuals within one organization, company, institution or affiliates thereof are considered one party. The “at least two parties” must be parties who are not affiliated with each other in any sense. Further, “accessibility” of information also means that the information is
20 available upon demand, for example, of a first party and does not require an affirmative action on the part of the second party who is in possession of the information to send the information to the first party upon request by the first party, for example, as in sending information by e-mail.

25 An “Entity” shall mean an academic institution, hospital, research institution, company, organization or an individual within such. Generally, an entity can be an institution and all individuals within that institution, for example if all the individuals within the institution are obligated by agreement to assign their inventions to the institution. An example is a university with multiple campuses, in which all employees of the university, regardless of campus, are considered as one entity,
30 because employees on all the campuses are required to assign their inventions, developed by virtue of their employment, to the university. However, in other

WO 01/26002

PCT/US00/27411

institutions, for example, in a non-U.S.-based university, individuals working there may not be required to assign their inventions to the university, and may own the inventions in their own right. In such instances, each such individual is considered as one entity. Thus, for the purposes herein, organizations or individuals that are

5 affiliated with each other are considered as the same "entity." As another example, if organization A has licensed or assigned a technology to organization B, the provision of information regarding the technology by organization B or by both B and A to C, for example, for the purpose of sublicensing technology to C, is considered as provision of information by a single entity.

10 "Invention disclosure" means any writing capturing a new idea or a new invention. The writing may be in the form of notes, for example, as recorded in one or more inventors' laboratory notebooks, or may be on an Invention Disclosure form or may be a manuscript.

A "Manuscript" is a document that is prepared for submission to a journal or

15 book editor for publication or for submission to an organization for presentation at a scientific meeting, including submission for poster presentations.

"Previously unpublished information" means information that has been previously held in confidence and has not been previously publicly disclosed.

The system of the present invention can contain unpublished information

20 pertaining to manuscripts or invention disclosures or unpublished patent applications. The manuscripts can contain information submitted or to be submitted to a journal for publication. The manuscripts can also contain information submitted or to be submitted to meeting organizers for presentation at meetings. The presentation can be an oral presentation or a poster presentation. The meetings can be scientific meetings.

25 Furthermore, the unpublished information can also pertain to unpublished experimental results. Experimental results can be results from in vitro studies, such as cellular studies and assays or from in vivo studies, such as animal studies for studying toxicology, pharmacology and carcinogenicity. Experimental results can also be results of clinical trials, for example, in humans for drugs for human use or in

30 animals, for drugs for animal use. Clinical trials include human safety trials, typically referred to as Phase I studies, or human dosing trials, typically referred to as Phase II

WO 01/26002

PCT/US00/27411

studies, or human efficacy trials, typically referred to as Phase III studies. However, the studies can be combined. For example, there can be a Phase I/II study in which both safety and dosing data are collected. Moreover, there can be a Phase II/III study in which dosing and efficacy data are collected.

5 Additionally, the system can contain published information such as published patent applications, issued patents or published scientific or news articles. Further, the information in the system can be abstracts or can be entire or complete documents. Preferably, the unpublished information contains novel subject matter that has not been previously publicly disclosed. More preferably, the novel subject matter has not
10 been previously claimed or described in an unpublished patent application.

 Furthermore, the system may provide, with reference to a particular technology, a patent search that lists published and/or unpublished patents and/or patent applications that affect the patentability and/or freedom of operation of the listed technology. For example, if a license to a dominating patent is needed to
15 practice the particular invention in question, such a dominating patent may be appended to the listed technology.

 Thus, there is contemplated a public patent system and a confidential patent system. The confidential patent system contains confidential information on unpublished information, such as unpublished invention disclosures and/or patent
20 applications. The public system contains information on published patents and patent applications such as those directed to publicly known technologies.

 For the public patent system, access to the patent information may be controlled. For example, before a viewer can access the patent information, the viewer may need to agree to pay a fee. The payment can be based on a per view
25 basis, e.g., one payment for viewing the information related to one technology, such as patent information relating to HER2 antibodies, for example.

 Moreover, the system may include information regarding licensees of a particular technology. The identification of licensees may be based on published information, such as from filings with the SEC, or information published by
30 institutions such as universities. This information may be used, for example, by a company seeking a license to technology that has already been exclusively licensed to

WO 01/26002

PCT/US00/27411

another entity. Thus, the company may wish to obtain a license from the existing licensee.

The information that is accessible through the system of the present invention can be information that is collected from three entities, four entities, five entities, six
5 entities, seven entities, eight entities, nine entities, or ten entities. Preferably, the information is collected from about eleven to fifteen entities. More preferably, the information is collected from about sixteen to twenty entities. Most preferably, the information is collected from about twenty-one to twenty-five entities. However, the number of entities can be greater than twenty-five. More preferably, the number is
10 greater than thirty. Most preferably, the number is greater than forty or fifty or a hundred and fifty or two hundred.

Additionally, the information that is collected is accessible to at least two parties. Preferably, the information is accessible to about eleven to fifteen parties. More preferably, the information is accessible to about sixteen to twenty parties.
15 Most preferably, the information is accessible to about twenty-one to twenty-five parties. However, the number of parties can be greater than twenty-five. More preferably, the number is greater than thirty. Most preferably, the number is greater than forty.

The information that is collected can be compiled, for example, in the form of
20 a database. This database can be made accessible to multiple parties via the Internet or via Intranet services. Further, the database can be housed in a server or can be housed with an Internet Service Provider ("ISP"). The manner in which the database is set up is conventional in the art. Moreover, an independent contractor can be hired to construct the desired website, database, and search engine and select the
25 appropriate ISP and utilize the appropriate encryption/decryption technology or security to implement the present invention. For example, a system can be set up or constructed in such a way as to provide a means for accepting a search term, a means for searching the database, a means for providing results of a search, for example, by listing one and all items that meet the search criteria. Moreover, one skilled in the art
30 can also be hired to create linkages between an initial search result and further information regarding an item listed in the result. For example, an item can be linked

WO 01/26002

PCT/US00/27411

to further or more detailed information about the item, which can be textual material and/or an e-mail address, for example, the e-mail address of the institution providing the information or the invention of the information that is listed in the result, and/or the item can be linked to an audio-visual presentation, such as one given by the

5 inventor of the information listed. The further information about the item resulting from a search can be expert's opinion on the subject. The expert's opinion can include opinion of one or more experts. The skilled contractor can also create a means for providing notification of addition of new information into the database. The skilled contractor can also create a means for keeping track of the identity of a

10 party who is accessing or has accessed the database, the total number and identification of parties who have accessed a given site in the database, for example, who has accessed information provided by a particular university. The skilled contractor can further provide a means for tracking the click stream of a party accessing the database so as to determine the subject areas of interest to a particular

15 party.

The search term can be any terms conventionally used by persons skilled in the art to conduct searches for the technology sought. Further, the search term can be selected a list of categories including but not limited to: a disease category, a condition category, a technology category, a product category, a product-in-

20 development category, a date category, an institution category, a manuscript category, an invention disclosure category, a patent application category, an issued patent category, a product candidate category, and a miscellaneous category.

Each category can be further subdivided into subcategories. The categorization is conventional in the art. For example, the disease category can be

25 subdivided into diseases affecting certain organs or diseases arising from different causes. Representative disease categories and subcategories are shown in Figures 1A-1D. Hence, disease categories can include, but is not limited to the following: cardiovascular diseases, infectious diseases, cancer, autoimmune diseases, inflammatory diseases, central nervous system disease, neuronal disorders, metabolic

30 disorders such as diabetes, diseases of the aged, and a miscellaneous category. Further subcategories can be included as well. For example, cardiovascular diseases

WO 01/26002

PCT/US00/27411

can include ischemia and myocardial infarction. Central nervous system disease can include Alzheimer's disease and Parkinson's disease. Infectious diseases can include infections by bacteria, viruses or fungi. Further subcategorization can include, for example, in the viral infectious disease category: hepatitis B infection ("HBV"),
5 hepatitis C infection ("HCV"), and human immunodeficiency virus infection ("HIV"). Cancer can include, for example, brain cancer, breast cancer, lung cancer, prostate cancer, ovarian cancer, colon cancer, liver cancer, pancreatic cancer, and gastric cancer. Autoimmune diseases can include, for example, lupus erythematosus. Inflammatory disease can include, for example, osteoarthritis, inflammatory bowel
10 syndrome, and psoriasis. These categories or subcategories are not intended to be mutually exclusive of each other. A given disease may fall into several different categories or subcategories. For example, stroke may fall within the category or subcategory of cardiovascular disease as well as the category or subcategory of central nervous system disease or disorder as traumatic brain injury. Osteoarthritis
15 may fall within the category or subcategory of cartilage disease or inflammatory disease.

In one embodiment of the present invention, the unpublished information contains technology or products that are available for licensing to others. The technology can be any technology including those in the computer and
20 communications area, those in the biotech and pharmaceutical area, and those in the engineering and petroleum area. For example, the technology that is available for licensing in the computer and communications area can include but is not limited to: computer hardware technology, computer software technology, electronic technology, communications technology, multimedia technology, satellite technology, cable
25 technology, and wireless technology.

The technology that is available for licensing in the engineering and petroleum area can include but is not limited to electrical engineering technology, mechanical engineering technology, chemical engineering technology, civil engineering technology, petroleum technology, and aerospace engineering technology.

30 The technology that is available for licensing in the biotech and pharmaceutical area can include but is not limited to technology applicable to one or

WO 01/26002

PCT/US00/27411

more of the following areas: gene therapy, cell therapy, vaccine, diagnostics, small molecule drug discovery, gene discovery, expression, vector, purification, manufacturing, formulation, drug delivery, gene function identification, microarray, sequencing, separation, antibody, ribozymes, antisense, RNA-complementary molecules, DNA-complementary molecules, method of treatment, growth factor, cell differentiation, cytokine, cell receptor, and signaling. Representative biotech and pharmaceutical technology categories are shown in Figure 2. RNA-complementary molecules and DNA-complementary molecules include peptide nucleic acids, and compounds of the family of phosphoramidates.

10 In another embodiment of the present invention, the system utilizes a computer and/or a memory device. The processor can be configured to receive a query for conducting a search. The system of the present invention is configured such that the processor can effect a search of the database based on a query, and generate results of a search in a display format, such as a list of items meeting the criteria of the query.

In one aspect of the present invention, therefore, the system contains and includes but is not limited to the following components: (a) a means for storing unpublished information; (b) a means for receiving a query for a search; (c) a means for conducting a search of the stored unpublished information; and (d) a means for displaying results of a search, where the unpublished information comprises information such as manuscripts, patent applications, and invention disclosures. Additionally, the system can include published information. Further additionally, the system can contain either published or unpublished experimental results.

25 In yet another embodiment of the present invention, a method is provided that contains and includes but is not limited to the steps of: (a) viewing, using a computer, a listing of unpublished information, wherein the unpublished information is collected from at least three entities; (b) transmitting, using a computer, a query to search the listing of unpublished information; and (c) receiving, using a computer, results of the search. Optionally, the system can include published information.

30 In a further embodiment of the present invention, there is provided a method of using a computer to search for technology available for licensing containing and

WO 01/26002

PCT/US00/27411

including but not limited to the steps of: (a) transmitting, using a computer, a search term for searching a database; and (b) receiving, using a computer, results of the search, where the database contains and includes but is not limited to unpublished information. The unpublished information can be manuscripts, invention disclosures
5 and/or patent applications. Optionally, the system can include published information.

In yet another embodiment of the present invention, there is provided a method of providing unpublished information using a computer, comprising the steps of: (a) creating a means for storage of unpublished information that can be searched; and (b) providing access of stored unpublished information to a designated user,
10 where the unpublished information comprises information containing and including but is not limited to manuscripts, invention disclosures, and/or patent applications. Optionally, the system can include published information.

In another embodiment of the present invention, the method and system includes creating and installing a firewall to prevent any non-designated user from
15 accessing the stored unpublished information. This method and system can be created by persons skilled in the art.

One convenient method of practicing the subject invention is by allowing subscribers access to the database by using a website. In this embodiment, subscribers may access the website using, for example, the Internet. It is, of course,
20 extremely important that the database of confidential information accessed be secure.

The website may comprise at least two levels of confidential information, the first level providing sufficient information to inform potential licensees or partners of the general nature of the technology to be licensed and the second level providing additional detail and, optionally, experimental data. The use of multiple levels of
25 confidential information provides several advantages. For example, universities and companies tend to solicit interest in their technologies by sending non-confidential information about their technologies to potential licensees or potential partners. Very often, the non-confidential information is insufficient to inform those people evaluating technologies ("Evaluators") exactly as to the nature of the technologies. If
30 the Evaluators are busy, technologies lacking sufficient information may not be pursued. Sometimes, Evaluators respond to the universities or companies

WO 01/26002

PCT/US00/27411

("Licensors") asking for more detailed information. When this happens, universities or companies typically put a confidential agreement in place before sending out the more detailed, often confidential information. This process typically takes several months.

5 By listing a first level of confidential information that contains sufficient information to inform potential licensees or partners as to the nature of the technology being licensed, Evaluators can quickly focus on those that align with their interests. The first level of confidential information also serves to alert those potential licensees of potential conflict with their internal programs and of the possibility of
10 contamination of internal research if they view the second level confidential information.

 For example, a first level of information might be "a small molecule inhibitor of PI3 kinase that inhibits tumor metastases when injected intravenously into mice." Thus, if a potential licensee has an internal research program for looking for a PI3
15 kinase inhibitor, they may consider whether or not they want to look at the more detailed second level confidential information and run the risk of perhaps being accused of misappropriating another party's trade secrets.

 The second level of confidential information serves to provide a more detailed description of the technology and, optionally, some experimental data. In the
20 example above of an inhibitor of PI3 kinase, the second level of confidential information may have, for example, the family of inhibitory compounds. Optionally, there is a third level of confidential information, either available on the Internet or by a hard paper copy, which contains the chemical structures of the specific compounds that have the inhibitory effect.

25 Another example of a first level confidential information can be "Identification of the role of a T-cell secreted protein in regulating inflammatory response." A second level confidential information in this regard can be experimental data showing enhancement and suppression of inflammatory response using the protein and an antibody to the protein, respectively.

30 To address the issue of contamination of internal research, a series of questions can be provided between the first level of confidential information and the

WO 01/26002

PCT/US00/27411

second level of confidential information. Thus, for example, before proceeding to the second level of confidential information, viewers may be required to answer questions regarding whether they know of any internal research in the area of the technology being viewed, and whether they are certain that they want to proceed to the second level.

Further, the website can be configured such that the user is informed of new technologies listed since the last time that user visited the website. Furthermore, a message can be sent to the subscriber when new technology is listed which is relevant to the subscriber's field of interest. This can be done, almost immediately, using electronic mail or by other electronic transmissions.

The information can be provided as different categories and subcategories as described above and as depicted in the figures herein. Further, the searcher is able to combine key words from different fields, for example, a search for a growth factor for treatment of obesity (a metabolic disease) or a search for a cytokine discovered by a researcher at a particular university.

Search results can be ordered chronologically and/or alphabetically by, for example, research institution. Further, the website can be structured to allow a user access to more detailed information about the technology, such as by accessing further information and/or an audio-visual presentation of a chosen technology by the inventor or entity providing of the technology.

The invention may also be configured to allow the user to send questions via electronic mail to appropriate persons, such as the inventor or entity providing the technology or experts available as consultants regarding that technology. The website can then post frequently asked questions and answers, as well as an Expert Opinion pages.

In the practice of this invention, in collecting and disseminating the confidential information, some entities may wish to access the confidential information just at one point in time, in contrast to being a subscriber, contracting for a longer time subscription to the confidential information residing in the confidential database. Thus, it is within the contemplation of this invention to provide for different ways to access the confidential database of information relating to

WO 01/26002

PCT/US00/27411

technologies, including products, that are available for licensing, sale or partnering.

In one embodiment of the invention, an entity may obtain access to the confidential database of technology information by being a subscriber who would pay a subscription fee and obtain access to the entire database of confidential information
5 based on authorized access, such as by use of a password and user identification number ("ID"). Such user's access may be monitored whenever user accesses the confidential information of any party. In such an example, user can log into the confidential website using the user ID and password.

In another embodiment of the present invention, an entity may obtain access to
10 the confidential information residing in the confidential database on a case by case basis, such as, by first contacting the group or person in charge of authorizing access to the confidential site, for example, by E-mail or by submitting a request such as one that may be available on a non-confidential page of a website, and receiving authorization to access the confidential information, such as by obtaining a password
15 and user ID.

In another embodiment of the present invention, the entity desiring confidential information may request the information directly, such as by E-mail, or via the website as above, and the information may be sent to the requesting party electronically or by fax or by mail.

20 In certain situations, an entity may prefer to send a query or request for a search to the supplier of the database. The supplier can then do a search of the database for technologies of interest to the entity. In this embodiment of the invention, the entity does not access the database directly.

The click stream of users can be monitored to identify who and how many
25 users access the different levels of the website. Furthermore, a report can be generated periodically, e.g., monthly, for each information provider, the report including, for example, how many companies accessed information regarding the information provider's technology, as well as a description of the companies and what level of detail these companies seek. A report can also be generated periodically for
30 the purchasing entity with information such as the number of employees that accessed the database and regarding the fields probed. A website can further be constructed

WO 01/26002

PCT/US00/27411

such that the person or entity providing the unpublished information on a technology can access the website and view that technology and any publicly accessible information, but cannot access the website and view other person's or entity's technology without being an authorized subscriber to the website.

5 Finally, a database for storing information regarding licensing terms for benchmarking purposes can also be developed.

 The above-described databases and websites may be designed using techniques known in the art. For example, persons skilled in the art for constructing websites and databases can be found at known companies, for example, those in
10 Silicon Valley in California, such as Oracle, Inc. Others can be found via the Internet using search engines such as Yahoo.com and Google.com. Further encryption software is currently available in the marketplace. An easy software to use is PGP (Pretty Good Privacy) that is available from MIT and can be downloaded from the Internet.

15 In one embodiment of the present invention, a research scientist (hereafter "Principal Investigator") or an OTT personnel of an Information Provider organization can transfer confidential information for input into the system of the present invention via e-mail using an encryption/decryption software, such as PGP software, to scramble the message. The Principal Investigator or OTT personnel can
20 provide addressee of the e-mail message a key for unscrambling the message. Alternatively, or in addition, Principal Investigator or OTT personnel may be given password access to a secured system via Intranet. The Principal Investigator and the OTT personnel may be given access to a website (hereafter a "Designated Website") to fill in a template for conveyance of the confidential, previously unpublished
25 information. The template can be structured so as to allow the Principal Investigator or OTT personnel to provide one or more of the following information: Name of Principal Investigator, Title, Organization, Telephone Number for Work, Telephone Number for Home, Cell Phone Number, Work Address, E-Mail Address, Facsimile Number, and Preferred Mode of Communication. The system of the present invention
30 includes a compilation of information on contacts, including Principal Investigators and OTT personnel.

WO 01/26002

PCT/US00/27411

In another embodiment of the present invention, the system includes a template structured to allow Principal Investigator or OTT personnel to indicate whether the unpublished information being submitted is a Manuscript for submission to a journal for publication or for submission to meeting organizers for presentation at a meeting. If the unpublished information is intended to be submitted to a journal for publication, the template includes an area for indication of the Name of the Journal, and/or Intended Date of Submission of Manuscript. If the unpublished information is intended for submission to meeting organizers for presentation at a meeting, the template includes an area for specification of the Name of the Meeting, the Location of the Meeting, the Date of the Meeting, the Expected Date of Publication of Abstracts for the Meeting, the Deadline for Submission of Abstract, and/or the Intended Date of Submission of Abstract.

The system of the present invention can include the capability of sending an automatic response to a Principal Investigator and/or OTT personnel, acknowledging receipt of confidential information transmitted by the Principal Investigator or OTT personnel. The automatic response can include a message indicating the expected date of the next action to be taken.

The system of the present invention also includes a listing of all agreements executed through use of the system and the financial terms of such agreements. Preferably, this listing is searchable by name of Selling institution, name of Buying institution, date of execution, technology or disease area of the subject matter of the agreements.

In another embodiment of the system of the present invention, a message appears when an authorized party accesses the system, the message alerting the party to the confidential nature of the materials the party is about to see. For example, the message can read: "You are about to view confidential and/or proprietary subject matter." Additional language may be added, for example: "Viewing of this subject matter is subject to terms and conditions of a Confidential Disclosure Agreement which your employer has signed and to which you are bound."

In a further embodiment of the system of the present invention, before an authorized party accesses a detailed description of the unpublished information, a

WO 01/26002

PCT/US00/27411

message appears on the system, warning the party of possible issue of contamination of ideas, and/or not to access the detailed information if there is any concern about such possible contamination. For example, the message can read: "You are reminded that the information you are about to see is confidential and proprietary. If your
5 company or you are engaged in research in the same or similar area, please remember that you are prohibited from using the information or knowledge gained herein for you or your company's benefit without first obtaining a license to use such information."

In another embodiment of the present invention, the system affords a party
10 accessing the system to order a copy of the unpublished information. The system can contain a page seeking information as to how the party wishes the information to be sent, for example, by facsimile, by first class mail or by courier, such as Federal Express or United Parcel Service or Airborne Express.

The system of the present invention can include a page to allow a party
15 accessing the system to indicate whether the party is interested in obtaining an option to license the technology, or a license to the technology, or in supporting a research and development collaboration ("R&D Collaboration"), or in sponsoring a research program, or in co-development of a product, or in co-commercialization of a product, or in submitting a bid, obtaining further information, seeking answers to questions, or
20 is not interested.

The present system can also include a set of minimum financial terms for licensing the technology, for granting an option to license the technology and/or for supporting a R&D Collaboration.

Further, the system can include a template for a bid or an offer that the party
25 accessing the system can fill in and submit. For example, the template can include one or more of the following: Option Fee, Option Term, Option Extension or Renewal Fee, License Fee, License Term, License Maintenance Fee, prepaid Royalties, Patent Preparation and Filing Expenses, Royalties (in percent of Net Sales), R&D Collaboration Term, R&D Collaboration Support, and Milestone Payments. The
30 Milestone Payments can include one or more of the following: First Issuance of a U.S. Patent, First Issuance of a European Patent, First Issuance of a Japanese Patent,

WO 01/26002

PCT/US00/27411

First Issuance of a Patent in any one of the ROW (Rest of World) countries, Initiation of Animal Studies, Naming of a Lead Molecule, Filing of a First Investigational New Drug Application ("IND") or equivalent in any country, Initiation of a First Phase I or Safety or equivalent Clinical Study in Humans in any country, Initiation of a First Phase II or Dosing or equivalent Clinical Study in Humans in any country, Initiation of a First Phase III or Efficacy or equivalent Clinical Study in Humans in any country, Filing of a First New Drug Application ("NDA") or Product License Application ("PLA") or equivalent in any country, First Regulatory Approval for Marketing in any country, Regulatory Approval for Marketing in a second country, Regulatory Approval for Marketing in a third country, Regulatory Approval for Marketing in a fourth country, etc.

The bidding process may include one or two or more rounds of bidding before a license or option is granted.

In an embodiment of the present invention, the system contains unpublished information that includes experimental data on a product or a product-in-development (collectively, "Product Opportunity") that is undergoing development as a drug for human or animal use. The experimental data can be any data that is helpful in the evaluation of the Product Opportunity. For example, such data can include one or more of the following studies: in vitro studies, such as cellular studies or assay, in vivo animal studies, animal safety studies, animal efficacy studies, toxicology studies, carcinogenicity studies, pharmacology studies, human safety studies, human dosing studies, and human efficacy studies.

In a further embodiment of the present invention, the system contains expert's opinion on a technology or a Product Opportunity. The expert's opinion can be the opinion of one or more experts in the field. The expert can be anyone having expertise in an area relevant to the technology that is available for licensing. For example, the expert can be someone having expertise in the development and commercialization of a drug for human or animal use. The expert can be a research scientist, a clinician, a toxicologist, a pharmacologist, an oncologist, a person knowledgeable in the area of manufacturing, a regulatory expert knowledgeable in the area of regulatory approval for commercialization of drug, a financial expert

WO 01/26002

PCT/US00/27411

knowledgeable in the financial risk/cost/benefit analyses of developing a product for commercialization, a marketing expert knowledgeable in the area of marketing and competitiveness of the technology or Product Opportunity.

5 The Product Opportunity of the present invention includes any product that is
useful for the diagnosis, prophylaxis and treatment of human and animal diseases and
conditions. For example the Product Opportunity can pertain to the following
products: a gene therapy product, a cell therapy product, a vaccine product, a
diagnostic product, a small molecule therapeutic product, a recombinant protein
product, a DNA product, a viral vector, a formulation product, a microarray product,
10 an antibody product, a growth factor, a cytokine, a DNA-complementary product, a
RNA-complementary product, a ribozyme, and an antisense product. The DNA- or
RNA-complementary product can be a peptide nucleic acid or a phosphoramidate or
similar compound.

15 In another embodiment of the present invention, the system can accept a
question and can notify a person, such as an expert, or the system administrator of the
arrival of a question, for example, by e-mail. The system can display the question and
accept a response from a person, such as the expert and system administrator. The
system can additionally notify the person sending the question of the arrival of a
response. The system can further display the response.

20 The above detailed embodiments and the Example below are given by way of
example to facilitate a better understanding of the invention and are not intended to be
limiting.

WO 01/26002

PCT/US00/27411

Example 1

This is an example of a proposed bid with an independent contractor for construction of a website of the present invention. Services that can be provided are:

1. Set up of FTP for server space
- 5 2. Set up of web space for placement of domain and HTML docs
3. Set up of web site to address of <http://www.yourcompany.com>
4. Email to read as client request
5. Web space for 40 MB on T3 line
6. Transfer of 2000 MB of data per month
- 10 7. All photo scans and placements for the entire site to satisfaction
8. All graphics for site to satisfaction
9. Search engine submittal for 901 search engines for site
10. All exchange links to site of choice that cooperate
11. All confidential information will be stored in password-protected
- 15 directories and served through CGI utilizing a username/password system
12. On login to the CGI mentioned above, an automatically generated listing of new technologies will be displayed next to browsing and searching options.
13. With a profile system integrated into the site, each Subscriber will be able
- 20 to receive daily email bulletins of relevant new technologies
14. The search will be able to integrate any combination of criteria desired
15. Search results can be ordered by chronology and alphabetically by research institution
16. Different fields and keywords can be combined in the search to retrieve
- 25 more pertinent results.
17. By using an intrasite email system for technology feedback, both email questions and their answers will be available to your company.
18. Multiple levels of detail can be integrated into the site to provide a more informative browsing experience.
- 30 19. Every page access will be recorded by user ID and displayed in a variety of different reports for site administration.

WO 01/26002

PCT/US00/27411

20. The recording system stated above can be used to supply data for monthly Information Provider and Purchaser Organization reports.
21. A database can be created to store information on licensing terms, and formatted for a wide variety of standard formats.
- 5 22. Information Providers will be able to see what confidential information of theirs has been posted on the site, but not what confidential information others have supplied. All confidential information will remain secure.
23. All new information will be dated upon submission and served after differing periods of time dependent on the level of membership of each individual member. For instance, Gold Club members could receive information as it arrives, while Silver Club members might receive it two months later.
- 10 24. An automatic bidding system will be integrated into the site, a system where members can fill out a form to bid on a technology and have their bid both posted, if desired, and emailed to a site administrator address.
- 15 25. Closing bid dates will be generated differently for different levels of memberships, and a listing of bid dates will be kept automatically updated.

20

WO 01/26002

PCT/US00/27411

What is claimed is:

1. A computer-implemented method, comprising:
 - (a) transmitting a query to search a listing of unpublished information;
 - 5 (b) receiving results of the search; and
 - (c) viewing the results of the search, the listing of unpublished information including information that is confidential, that is collected from at least three entities and that relates to technologies that are available for licensing.
- 10 2. The method of claim 1, wherein the unpublished information includes manuscripts.
3. The method of claim 1, wherein the unpublished information includes invention disclosures.
- 15 4. The method of claim 1, wherein the unpublished information includes unpublished patent applications.
5. The method of claim 1, wherein the unpublished information includes
20 experimental data.
6. A computer-implemented method, comprising:
 - (a) transmitting a search term for searching a database;
 - (b) receiving results of the search, the database storing unpublished
25 information, and the unpublished information being confidential, being collected from at least three entities, and relating to technologies that are available for licensing.
7. The method of claim 6, wherein the unpublished information includes manuscripts.
- 30 8. The method of claim 6, wherein the unpublished information includes

WO 01/26002

PCT/US00/27411

invention disclosures.

9. The method of claim 6, wherein the unpublished information includes patent applications.

5

10. The method of claim 6, wherein the unpublished information includes experimental results.

11. A computer-implemented method of providing unpublished information, comprising:

10

(a) providing storage of searchable unpublished information; and

(b) providing access of the stored unpublished information to a designated user,

wherein the unpublished information comprises information that is confidential, is collected from at least two entities, and relates to technologies available for licensing.

15

12. The method of claim 11, wherein the unpublished information includes at least one selected from the group consisting of manuscripts, invention disclosures, patent applications and experimental results.

20

13. The method of claim 11, further comprising providing a firewall to prevent a non-designated user from accessing the stored unpublished information.

14. A computer-implemented method of using the Internet to license unpublished information, comprising:

25

displaying the unpublished information on a secured system, wherein the system is accessible via the Internet only to authorized individuals; and allowing submission of bids to license the unpublished information.

30

15. The method of claim 14, further comprising notifying individuals

WO 01/26002

PCT/US00/27411

submitting bids of a winner of the bidding.

16. The method of claim 14, wherein the unpublished information is confidential, is collected from at least two entities, and relates to technologies that are
5 available for licensing.

17. A computer-implemented licensing method, comprising:
receiving, from a client, a search request for unpublished information on
technology that is available for licensing, the unpublished information being
10 confidential and being collected from at least two parties; and
retrieving unpublished information on technology available for licensing in
accordance with the search request and sending the unpublished information to the
client.

18. The method of claim 17, further comprising: enabling the client and an
15 owner of the unpublished information to reach an agreement concerning the
technology described by the unpublished information.

19. A computer-implemented method of providing published and unpublished
20 information comprising:

(a) providing storage of searchable published and unpublished information;
and

(b) providing access of the stored published and unpublished information to a
designated user,

25 wherein the unpublished information comprises information that is
confidential, is collected from at least two entities, and relates to technologies
available for licensing.

20. The method of claim 19, wherein the published information includes at
30 least one selected from the group consisting of a patent application, an issued patent, a
journal article, and a news article.

WO 01/26002

PCT/US00/27411

21. The method of claim 1, wherein the technologies that are available for licensing comprise at least one selected from the group consisting of computer hardware technology, computer software technology, electronic technology, communications technology, multimedia technology, satellite technology, cable technology, and wireless technology.

22. The method of claim 1, wherein the technologies that are available for licensing comprise at least one selected from the group consisting of electrical engineering technology, mechanical engineering technology, chemical engineering technology, civil engineering technology, and aerospace engineering technology.

23. The method of claim 1, wherein the technologies that are available for licensing comprise at least one selected from the group consisting of gene therapy technology, cell therapy technology, vaccine technology, diagnostics technology, small molecule drug discovery technology, gene discovery technology, expression technology, vector technology, purification technology, manufacturing technology, formulation technology, drug delivery technology, gene function identification technology, antibody technology, ribozyme technology, antisense technology, DNA-complementary technology, RNA-complementary technology, method of treatment technology, growth factor technology, differentiation technology, cytokine technology, cell receptor technology, and signaling technology.

24. A method of obtaining confidential information on technologies for licensing purposes comprising:

- (a) submitting a query to obtain confidential information on a piece of technology that is available for licensing;
- (b) receiving authorization to access a restricted access confidential database to obtain the confidential information; and
- (c) accessing the confidential information in the database pursuant to the authorization,

WO 01/26002

PCT/US00/27411

wherein the restricted access confidential database comprises confidential information on technologies that are available for licensing and the confidential information is collected from at least three parties.

5 25. A system comprising a plurality of pieces of previously unpublished information, wherein the unpublished information is accessible electronically and is collected from at least two entities.

10 26. A system comprising software configured to provide a number of pieces of unpublished information, the unpublished information being accessible electronically, being confidential, being collected from at least two entities, and relating to technologies that are available for licensing.

15 27. The system of claim 26, wherein the unpublished information includes manuscripts.

 28. The system of claim 26, wherein the unpublished information includes invention disclosures.

20 29. The system of claim 26, wherein the unpublished information includes patent applications.

 30. The system of claim 26, wherein the unpublished information includes experimental results.

25 31. The system of claim 26, wherein the system further comprises software for storing an abstract of at least one of the pieces of unpublished information.

30 32. The system of claim 26, wherein the at least two entities are at least four entities.

WO 01/26002

PCT/US00/27411

33. The system of claim 26, wherein the at least two entities are at least five entities.

34. The system of claim 26, wherein the at least two entities are at least six
5 entities.

35. The system of claim 26, wherein the unpublished information is stored in a database.

10 36. The system of claim 35, wherein the database is accessible via the Internet.

37. The system of claim 35, wherein the database is accessible via an Intranet.

15 38. The system of claim 26, wherein the system is housed in a server.

39. The system of claim 26, wherein the system further comprises software configured to provide published information.

20 40. The system of claim 39, wherein the published information includes at least one selected from the group consisting of a patent application, an issued patent, a journal article, and a news article.

41. The system of claim 35, wherein the system further includes software that
25 accepts a search term for searching the database.

42. The system of claim 41, wherein the search term includes a term selected from the group consisting of a disease category, a condition category, a technology category, a product-in-development category, a date category, an institution category,
30 a manuscript category, an invention disclosure category, a patent application category, an issued patent category, and a product category.

WO 01/26002

PCT/US00/27411

43. The system of claim 35, wherein the system further comprises software that searches the database.

5 44. The system of claim 43, wherein the system further comprises software that provides a listing of an item as a result of a search.

10 45. The system of claim 44, wherein the system further comprises a linkage between the item listed as a result of the search and further information on the item.

 46. The system of claim 45, wherein the further information on the item includes an audio-visual presentation.

15 47. The system of claim 45, wherein the further information on the item includes an e-mail address.

 48. The system of claim 45, wherein the further information on the item includes textual material.

20 49. The system of claim 26, wherein the technologies that are available for licensing include at least one selected from the group consisting of computer hardware technology, computer software technology, electronic technology, communications technology, multimedia technology, satellite technology, cable technology, and wireless technology.

25 50. The system of claim 26, wherein the technologies that are available for licensing comprise at least one selected from the group consisting of electrical engineering technology, mechanical engineering technology, chemical engineering technology, civil engineering technology, aerospace engineering technology.

30 51. The system of claim 26, wherein the technologies that are available for

WO 01/26002

PCT/US00/27411

licensing include at least one selected from the group consisting of gene therapy technology, cell therapy technology, vaccine technology, diagnostics technology, small molecule drug discovery technology, gene discovery technology, expression technology, vector technology, purification technology, manufacturing technology, formulation technology, drug delivery technology, gene function identification technology, microarray technology, sequencing technology, separation technology, antibody technology, ribozyme technology, antisense technology, DNA-complementary technology, RNA-complementary technology, method of treatment technology, growth factor technology, differentiation technology, cytokine technology, cell receptor technology, and signaling technology.

52. The system of claim 26, wherein the system further comprises software that provides notification of new entries of unpublished information into the system.

53. The system of claim 26, wherein the system further comprises software that tracks the number of parties accessing the system.

54. The system of claim 26, wherein the system further comprises software that tracks the identity of parties accessing the system.

55. The system of claim 26, wherein the system further comprises software that tracks a search conducted by a party accessing the system.

56. The system of claim 26, wherein the system further comprises a memory device storing the unpublished information.

57. The system of claim 56, wherein the system further comprises a processor in communication with the memory device.

58. The system of claim 57, wherein the processor is configured to receive a query to conduct a search.

WO 01/26002

PCT/US00/27411

59. The system of claim 57, wherein the processor is configured to conduct a search based on input of a query.

5 60. The system of claim 57, wherein the processor is configured to provide a listing of at least one item as a result of a search.

61. The system of claim 57, wherein the processor is configured to provide notification of new information added to the memory device.

10

62. The system of claim 56, wherein the memory device stores published information.

63. The system of claim 26, further comprising a first template for conveyance of the unpublished information, wherein the first template includes a name of a person submitting the unpublished information and a brief description of the unpublished information.

15

64. The system of claim 26, wherein the unpublished information includes novel subject matter that has not been previously publicly disclosed.

20

65. The system of claim 64, wherein the novel subject matter has not been previously claimed or described in an unpublished patent application.

66. The system of claim 26, wherein the unpublished information includes information submitted or to be submitted to a meeting for presentation.

25

67. The system of claim 26, further comprising software that displays a warning that the unpublished information is confidential.

30

68. The system of claim 63, wherein the unpublished information includes

WO 01/26002

PCT/US00/27411

information to be submitted to a journal for publication and the first template comprises an intended date of submission of information to journal.

69. The system of claim 63, wherein the unpublished information includes
5 information to be submitted to a meeting for presentation and the first template comprises an intended date of submission of information to meeting organizer.

70. The system of claim 26, further comprising software displaying a second
template for conveyance of a bid.
10

71. The system of claim 70, wherein the bid is selected from the group
consisting of a bid for obtaining an option to license a technology described in the
unpublished information, a bid for obtaining a license to a technology described in the
unpublished information and a bid for sponsoring a research collaboration.
15

72. The system of claim 70, wherein the system further comprises software
that displays a notification of status of bidding on the unpublished information.

73. A system comprising: (a) means for storing unpublished information; (b)
20 means for receiving a query for a search; (c) means for conducting a search of the
stored unpublished information; and (d) means for displaying results of the search, the
unpublished information including information that is confidential, that is collected
from at least three entities, and that relates to technologies that are available for
licensing.
25

74. The system of claim 73, wherein the unpublished information includes
manuscripts.

75. The system of claim 73, wherein the unpublished information includes
30 invention disclosures.

WO 01/26002

PCT/US00/27411

76. The system of claim 73, wherein the unpublished information includes experimental results.

77. The system of claim 73, wherein the unpublished information includes
5 patent applications.

WO 01/26002

PCT/US00/27411

1 / 5

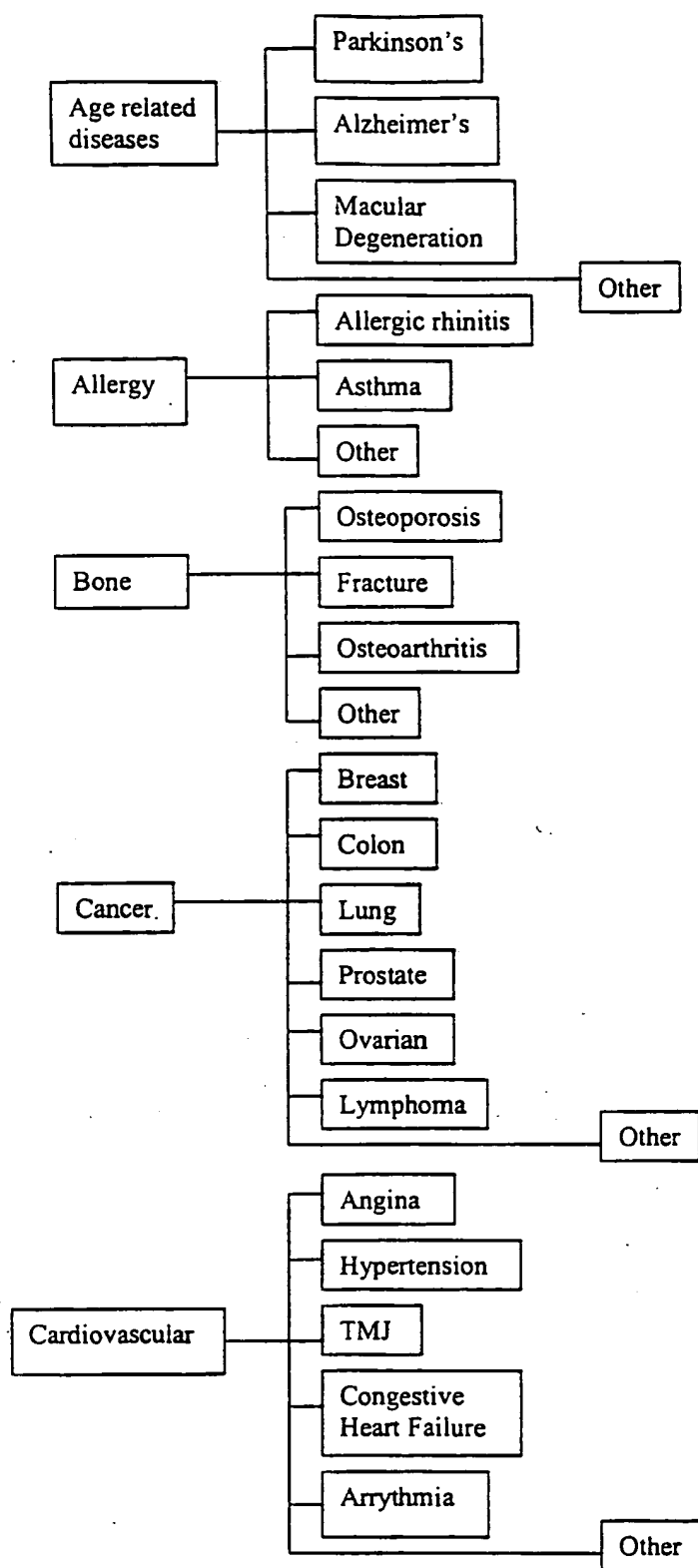


FIG. 1A

WO 01/26002

PCT/US00/27411

2 / 5

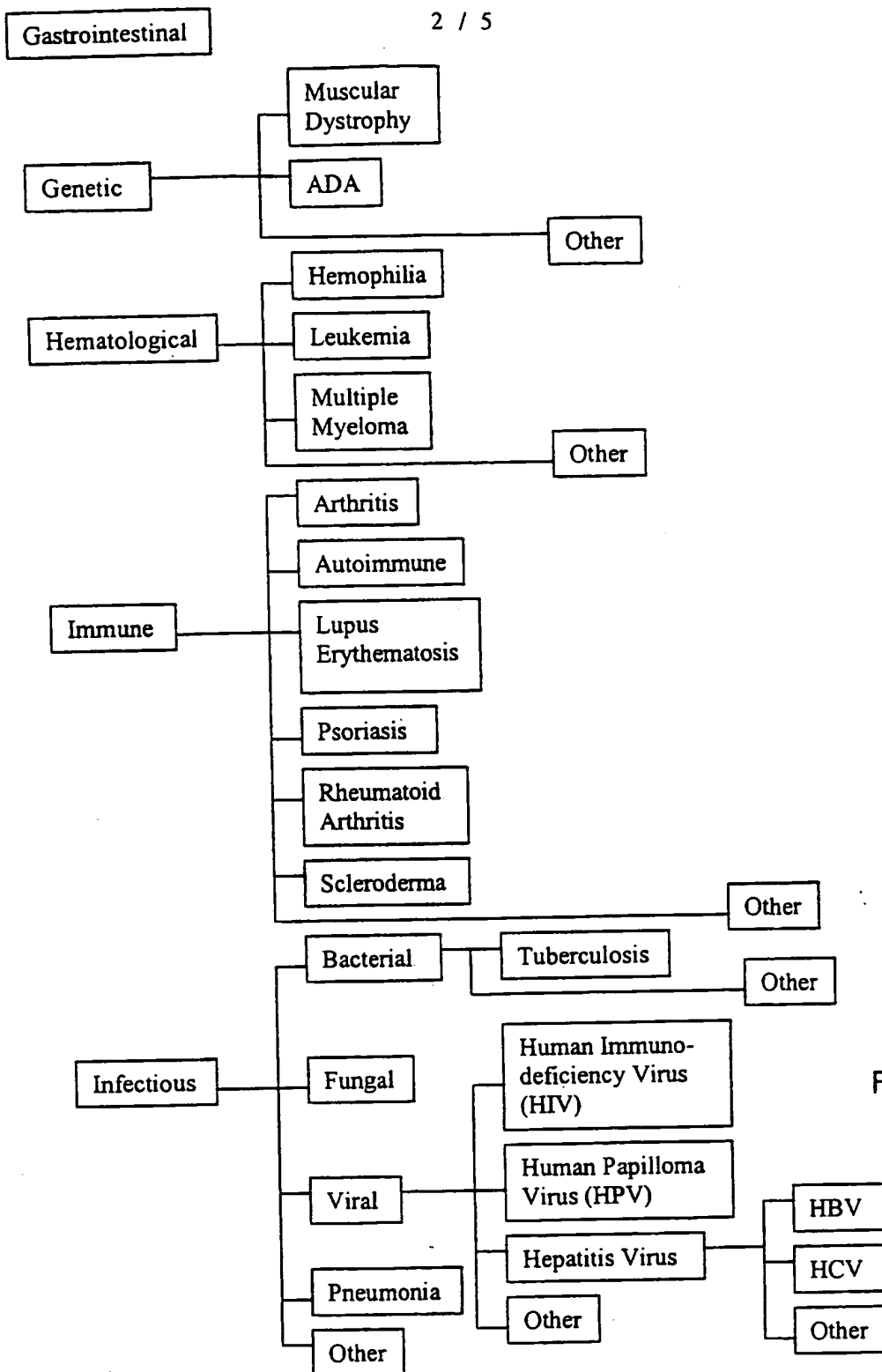


FIG. 1B

WO 01/26002

PCT/US00/27411

3 / 5

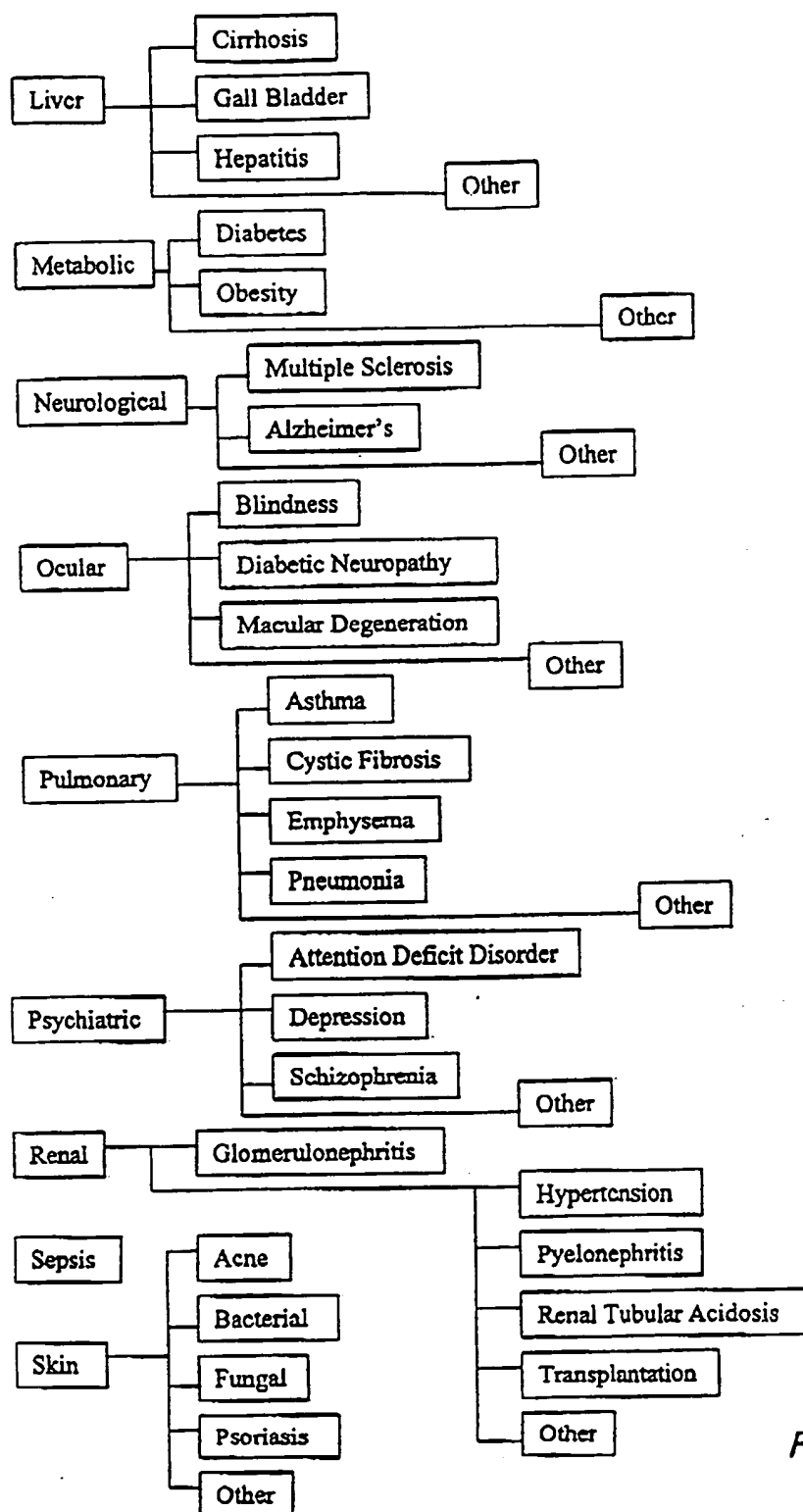


FIG. 1C

WO 01/26002

PCT/US00/27411

4/5

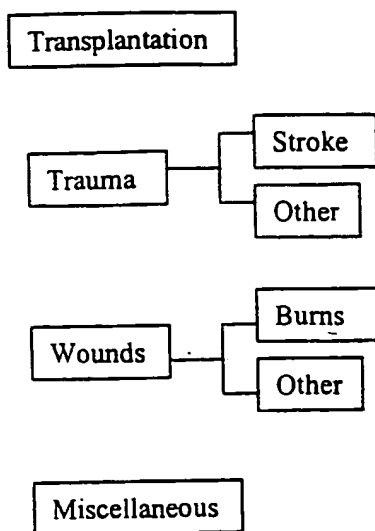


FIG. 1D

WO 01/26002

PCT/US00/27411

5/5

Adjuvants
Antibiotics
Antibodies
Antisense
Apoptosis
Cell therapy
Cytokines
Diagnostics
Drug Discovery
Expression technology
Formulation
Gene therapy
Genomics
Growth factors
Lymphokines
Microarray
Purification
Ribozymes
Separation
Sequencing
Vaccines
Vectors

FIG. 2

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/27411

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/60

US CL : 705/7; 707/100, 104

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/1, 7; 707/100, 101, 102, 104, 200

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

None

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

None

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,827,508 A (SHEAR) 02 May 1989, see abstract.	1-77
A	US 4,992,940 A (DWORKIN) 12 February 1991, see abstract.	1-77
Y	US 5,493,677 A (BALOGH et al) 20 February 1996, see abstract.	1-14 & 16-77
--		-----
A		15
A	EP 0766165 A2 (HASEBE et al) 02 April 1997, see abstract.	1-77
Y	US 5,629,980 A (STEFIK et al) 13 May 1997, see abstract.	1-14 & 16-77
--		-----
A		15

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
E earlier document published on or after the international filing date	*Y* document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*A* document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means	
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

30 DECEMBER 2000

Date of mailing of the international search report

22 JAN 2001

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

EDWARD R COSMANO

Telephone No. (703) 308-9783

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/27411

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y -- A A	US 5,896,298 A (RICHTER) 20 April 1999, see abstract. STILLMAN: "Behind the firewall: newsletter content can thrive in enterprise networks"; The Newsletter on Newsletters, 15 February 2000, v37, n3, page 3, see lines 35 & 36.	1-14 & 16-77 ----- 15 1-77